AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (original) A method for controlling the speed and/or direction of movement (A, B) of a screw discharger (1, 11, 101, 201), characterised in that the bending load on the screw (2, 12, 102, 202) of the screw discharger is measured with one or more transducers (112, 212) that generate a loading signal on the basis of which a drive system (110, 210) controlling the speed and/or direction of movement (A, B) of the screw discharger (1, 11, 101, 201) is controlled.

2. (original) A method according to claim 1, characterised in that when the loading value of the screw (2, 12, 102, 202) falls below a preset value y_1 the speed of movement of the discharger (1, 11, 101, 201) is increased.

3. (currently amended) A method according to claim 1 ~~or 2~~, characterised in that when the bending load on the screw (2, 12, 102, 202) exceeds a preset value x_1 the speed of movement of the screw is reduced and/or the direction of movement (A, B) of the screw is changed.

4. (currently amended) A method according to claim 1 ~~or 2~~, characterised in that when the bending load on the screw (2, 12, 102, 202) exceeds a preset value x_1 the speed of movement of the screw is reduced and if the bending load at this lesser speed of movement exceeds a preset value x_2, the value x_2 being equal to or greater than x_1, the direction of movement (A, B) of the screw is changed for a preset period of time.

5. (currently amended) A method according to ~~any of the above claims~~ claim 1, characterised in that a frequency converter (118, 218) is controlled on the basis of the bending load on the screw (2, 12, 102, 202), which frequency converter controls the drive system (110, 210) that controls the speed and/or direction of movement (A, B) of the screw discharger (1, 11, 101, 201).

6. (currently amended) An apparatus for controlling the speed and/or direction of movement (A, B) of a screw discharger ~~(1, 21, 101, 201)~~ (1, 11, 101, 201), which screw discharger comprises a frame (3, 23, 103, 203), a discharger screw (2, 12, 102, 202) attached to the frame and a drive system (110,210) for driving the discharger screw, characterised in that the apparatus comprises

one or more measurement transducers (112, 212) arranged to measure the bending load on the screw (2, 12, 102, 202),

a control unit (113, 213) for processing the measurement data transmitted from the transducer (112, 212) and for converting the data into a control signal for the drive system (110, 210) that controls the speed and/or direction of movement (A, B) of the screw discharger ~~(1, 21, 101, 201)~~ (1, 11, 101, 201),

data transmission equipment (214, 217, 219) for transmitting the measurement data from the transducer (112, 212) to the control unit (113, 213) and for transmitting the control signal from the control unit (113, 213) to the drive system (110, 210).

7. (original) An apparatus according to claim 6, characterised in that the drive system (110, 210) comprises a frequency converter (118, 218) arranged for controlling the speed and/or direction of movement (A, B) of the screw discharger (1, 11, 101, 201) generated by the drive system (110, 210).

8. (currently amended) An apparatus according to claim 6 ~~or 7~~, characterised in that one or more measurement transducers (112, 212) measuring the bending load on the screw (2, 12, 102, 202) is installed on the inside or outside surface of the screw pipe (107, 207).

9. (currently amended) An apparatus according to claim 6, ~~7 or 8,~~ characterised in that one or more measurement transducers (112, 212) measuring the bending load on the screw (2, 12, 102, 202) is located in the frame (3, 13, 103, 203) of the screw discharger.

10. (currently amended) An apparatus according to ~~any of the above claims 6-9~~ claim 6, characterised in that one or more of the measurement transducers (112, 212) is a strain-gauge transducer.